510(k) Summary My Lab 15 My Lab 20 Pie Medical



510(k) Summary

The following safety and effectiveness summary has been prepared pursuant to requirement for 510(k) summaries specified in 21CFR¶807.92(a).

807.92(a)(1)

Submitter Information

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(317) 5779070

Contact Person:

Carri Graham

Date:

December 15, 2004

807.92(a)(2)

Trade Name:

My Lab 15 / My Lab 20 Ultrasound Imaging Systems

Common Name:

Ultrasound Imaging System

Classification Name(s):

Ultrasonic pulsed echo imaging system

892.1560

Ultrasonic pulsed Doppler imaging system 832.1550

Classification Number:

90IYO

90IYN

807.92(a)(3)

Predicate Device(s)

Pie Medical

Picus

K023512

Medison

128BW

K012887

Additional Substantial Equivalence Information is provided in the following substantial Equivalence Comparison Table.

510(k) Summary My Lab 15 - My Lab 20 Pic Medical



807.92(a)(4)

Device Description

The MyLab15/MyLab20 is a compact console ultrasound system intended to be used by a physician to perform general diagnostic ultrasound studies. Its primary modes of operation are: B-Mode, M-Mode, PW Doppler and Color Flow Mapping and Tissue Enhancement Imaging (TEI). The MyLab15/MyLab20 is equipped with either an LCD TFT color display or a CRT color monitor. The full alphanumeric keyboard allows complete on-screen data entry of patient information and on-screen annotations. The MyLab15/MyLab20 can drive convex (CA) and linear array (LA) probes. The MyLab15/MyLab20 permits storage of images on a USB memory stick. The MyLab15/MyLab20 also saves fetal biometry data, acquired during obstetric examinations, into a database in the internal memory of the system, in order to track the fetal growth through different examinations during the same gestation. Optional accessories available for the MyLab15/MyLab20 include an S-VHS video recorder and a monochrome or color printer.

807.92(a)(5)

Intended Use(s)

Esaote's MyLab15/MyLab20 is a compact console ultrasound system intended to be used by a physician to perform general diagnostic ultrasound studies including Fetal, Abdominal, Pediatric, Small organ, Neonatal Cephalic, Cardiac, Transrectal, Transvaginal, Peripheral Vascular, Musculoskeletal (Conventional and Superficial).

510(k) Summary My Lab 15. My Lab 20 Pic Medical



Comparison Chart for Substantial Equivalence

General Characteristics	Esaote MyLab15/MyLab20				
	Applicatio	ns			
Fetal	Yes	Yes	Yes		
Abdominal	Yes	Yes	Yes		
Pediatric	Yes	No	Yes		
Small Organ	Yes	Yes	Yes		
Neonatal Cephalic	Yes	Yes	Yes		
Adult Cephalic	No	No	Yes		
Cardiac	Yes	Yes	Yes		
Transrectal	Yes	Yes	Yes		
Transvaginal	Yes	Yes	Yes		
Peripheral Vascular	Yes	Yes	Yes		
Musculo-skeletal (Conventional and superficial)	Yes	No	Yes		

Co43.581

General Characteristics	Esaote MyLab15/MyLab20	Esaote Picus (K023512)	Medison 128BW (K012887)		
	Transducer	т Туре			
Linear	Yes	Yes	Yes		
Convex	Yes	Yes	Yes		
2D Freq MHz	2.7 – 12.5	2.5 - 10	2.0 – 10		
PW Freq MHz	2.7 – 6.3	2.5 – 8	No		
Multifrequency probes	Yes	Yes	Yes		
Special probes	Endocavity probe	Endocavity probe	Endocavity probe		
	Biopsy attac	hments			
Convex	Yes	Yes	Yes		
Linear	Yes	Yes	Yes		
	Imaging n	nodes			
Real Time 2D	Yes	Yes	Yes		
M-mode	Yes	Yes	Yes		
PW Doppler	Yes	Yes	No		
CFM Doppler	Yes	Yes	No		
Amplitude Doppler	Yes	Yes	No		
Triplex	Yes	Yes	***		
Monitor size (inches)	15" CRT monitor 15" LCD	15" CRT monitor 10" LCD	12" CRT monitor		
ECG	Optional	Optional	No		
Digital archival capabilities	Yes	Yes	Yes		
VCR & Video printers	Yes	Yes	Yes		
M&A capabilities	Cardiac, vascular, Obstetric, Gynaecologic, Urology, and general purpose measurements	Cardiac, vascular, Obstetric, Gynaecologic, Urology, and general purpose measurements	OB/Gyn and general purpose measurements		
	Safety	,			
Electrical safety	EN60601-1	EN60601-1	EN60601-1		



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

JAN 2 5 2005

Pie Medical % Ms. Carri Graham Consultant The Anson Group 7992 Castleway Drive INDIANAPOLIS IN 46250

Re: K043588

Trade Name: MyLab15 / MyLab20 Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Number: 21 CFR 892.1560

Regulatory Name: Ultrasonic pulsed echo imaging system

Regulatory Number: 21 CFR 892.1570

Regulatory Name: Diagnostic ultrasonic transducer

Regulatory Class: II

Product Code: 90 IYN, IYO, and ITX

Dated: December 21, 2004 Received: December 28, 2004

Dear Ms. Graham:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the MyLab15 / MyLab20, as described in your premarket notification:

Transducer Model Number

<u>LA523</u> <u>CA421P</u> EC123 E8-5 R10 If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration Center for Devices and Radiological Health Document Mail Center (HFZ-401) 9200 Corporate Boulevard Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Page 3 – Ms. Graham

If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

Nancy C. Brogdon

Nancy C. Brogdon

Director, Division of Reproductive,
Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure(s)

4.3 Indications for Use

The following table provides the intended clinical use for the MyLab15/MyLab20:

						<u>M</u>	ode of Operation	<u>on</u>		
Clinical Application	Α	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify) TEI (3)
Ophthalmic								 	N [2]	N
Fetal	L	N	N	N_	 -	N	N			N
Abdominal	_	N	N	N	 	N_	N		N [2]	
Intraoperative (specify)	-			-			 		 	
Intraoperative Neurological	╁-	-	-	 -		 	 		N [2]	N
Pediatric	1_	N	N	N _	 	N	N		N [2]	N
Small Organ (specify) [1]	$oldsymbol{\perp}$	N	N	N_		N	N		N [2]	N
Neonatal Cephalic	_	N	N	N	 	N	N	 	N [2]	
Adult Cephalic	\perp	ـــــ	ļ.—	 	<u> </u>	<u> </u>		 	N [2]	N
Cardiac	1	N	N	N_		N	N		13121	<u> </u>
Transesophageal	_ _	 	—		-				N [2]	N
Transrectal	1	N	N_	N_		N	N			N
Transvaginal	\perp	N	N	N		N	N		N [2]	<u> </u>
Transurethral	\perp		 -		<u> </u>			+		
Intravascular		1_	_		 				NI (D)	N
Peripheral Vascular	\perp	N	<u> N</u>	N		N	N		N [2]	- N
Laparoscopic	\downarrow	\bot	1						N (2)	N
Musculo-skeletal Conventional		N	N	N		N N	N		N [2]	
Musculo-skeletal Superficial		N	N	N		N_	N		N [2]	N
Other (specify)	\neg	1								

N=new indication; P=previously cleared by FDA; E= added under Appendix E

Additional Comments:

[1] Small organs include Thyroid, Breast and Testicles.

[2] Applicable combined modes: B+M+PW+ CFM+Amplitude Doppler

[3] Tissue Enhancement Imaging (TEI)

Prescription Use ____V

(Division Sign-Off)

Division of Reproductive, Abdominal,

and Radiological Devices

510(k) Number_

The following tables provide the intended clinical use for the MyLab15/MyLab20 probes in combination with the system:

Transducer: LA523

						M	ode of Operation	<u> </u>		
Clinical Application	A	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify) TEI [3]
Ophthalmic								-		
Fetal				<u> </u>	<u> </u>	<u> </u>	 	 		\
Abdominal	_	N	N_	N_	<u> </u>	N	N		N[2]	N
Intraoperative (specify)	_			 	 	-	- 			
Intraoperative Neurological	_		<u> </u>	 	 	1	 		N[2]	N
Pediatric	1_	N	N	N_	 	N	N	 		N
Small Organ (specify) [1]		N	N	N	<u> </u>	N	N .		N[2]	
Neonatal Cephalic	_	N	N	N	<u> </u>	N	N		N[2]	N
Adult Cephalic	\perp				_		-			
Cardiac	1_	↓_	 	 	-			 		
Transesophageal	╁-	╁-	 		 	_	_	_		1
Transrectal	\bot	┷	 -				_	_		<u> </u>
Transvaginal	_		-		 		_			<u> </u>
Transurethral	\downarrow	\bot		-						<u> </u>
Intravascular	\downarrow		-						N[2]	N
Peripheral Vascular	\perp	_ N	N	N		N	N		11(2)	1
Laparoscopic		4-							NICOL	N
Musculo-skeletal Conventional		N	N	N		N	N		N[2]	
Musculo-skeletal Superficial		N	I N	N		N	N		N[2]	N
Other (specify)		T								

N=new indication; P=previously cleared by FDA; E= added under Appendix E Additional Comments:

- [1] Small organs include Thyroid, Breast and Testicles.
- [2] Applicable combined modes: B+M+PW+CW+CFM+Amplitude Doppler
- [3] Tissue Enhancement Imaging (TEI)

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	Prescription Use
(Division Sigh-Off) Division of Reproductive, Abdominal, and Radiological Devices 510(k) Number	tu

Transducer: CA421P

	T					M	ode of Operation	<u>on</u>		
Clinical Application	۸	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify) TEI [2]
Ophthalmic							 	1		
Fetal	<u> </u>	N	N	N		N	N		N[1]	N
Abdominal	T	N	N_	N	<u></u>	N	N	<u> </u>	N[1]	N
Intraoperative (specify)		_			<u> </u>		 			
Intraoperative Neurological	ļ_	 	↓—	↓	ļ		- 		- N(1)	N
Pediatric	<u> </u>	N	N_	N _	 	N	N	 	N(1)	
Small Organ (specify)	$oldsymbol{\perp}$	<u> </u>	ļ	<u> </u>	 		 			
Neonatal Cephalic	1	٠.		<u> </u>	ļ					
Adult Cephalic	╀-		<u> </u>		 		<u> </u>	 		
Cardiac		4_	 		 			 		1
Transesophageal	4-	-		-	-					
Transrectal	_	4_	+-		—					
Transvaginal	_	—	 	 	 -	<u> </u>				
Transurethral	4	-			- 					
Intravascular			_			- 		 		
Peripheral Vascular	_	-		 	-	 				 -
Laparoscopic			-		 			- 		-
Musculo-skeletal Conventional		_								
Musculo-skeletal Superficial		-		 						
Other (specify)										

N=new indication; P=previously cleared by FDA; E= added under Appendix E

Additional Comments:

[1] Applicable combined modes: B+M+PW+CFM+Amplitude Doppler.

[2] Tissue Enhancement Imaging (TEI)

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Transducer: EC123

	Mode of Operation									
Clinical Application	A	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify) TEI [2]
Ophthalmic				<u> </u>	<u> </u>	 	<u> </u>	 		
Fetal	_				<u> </u>	 		 	1	
Abdominal	_			<u> </u>	ļ	 	 			
Intraoperative (specify)	1_	 		↓ —	 	 		 	 	
Intraoperative Neurological	-	 		 	<u> </u>	 	 	 		
Pediatric	_			 	 	 			_	
Small Organ (specify)	_	↓_	-	 	 			 	 	
Neonatal Cephalic	_	<u> </u>	<u> </u>	 				 	-	
Adult Cephalic		<u> </u>	-	↓				 		
Cardiac	\perp	<u> </u>	↓ _		 	<u> </u>	 			1
Transesophageal	_	╁	↓	- -	-		 		N[1]	N
Transrectal	_ _	N	N	N_		N	N		N[1]	l _N
Transvaginal	_	N	N	N		N	N	_	- NIII	+ "
Transurethral		┷	 			<u> </u>			- 	1
Intravascular	4	1_	<u> </u>							
Peripheral Vascular	_	_	┿-	 		_				
Laparoscopic	_	_	_					 		
Musculo-skeletal	\perp	4-	_		 			-		
Conventional	_	- -	\bot			_				1
Musculoskeletal Superficial	_	_	-	_				_		
Other (specify)		\perp								i

N=new indication; P=previously cleared by FDA; E= added under Appendix E Additional Comments:

[1] Applicable combined modes: B+M+PW+CFM+Amplitude Doppler.

[2] Tissue Enhancement Imaging (TEI)

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Division of Repro	ductive, Abdominal,
and Radiological I	Devices
510(k) Number	VN43688

Transducer: E8-5 R10

	Mode of Operation									
Clinical Application	A	В	М	PWD	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic								<u> </u>		
Fetal			-	<u> </u>	<u> </u>	-		 		
Abdominal					 -	┧———				
Intraoperative (specify)				<u> </u>	<u> </u>		 			
Intraoperative Neurological	⊥_		<u>_</u>	ļ	<u> </u>	 		 		
Pediatric				ļ	<u> </u>			 		
Small Organ (specify)				<u> </u>						
Neonatal Cephalic	\perp		<u> </u>	<u> </u>	<u> </u>		<u> </u>	 		
Adult Cephalic				<u> </u>			- 	 		
Cardiac				↓	<u> </u>					<u> </u>
Transesophageal										
Transrectal		N	N	N		N .	N	_	N[1]	N
Transvaginal		N	N	N		N	N		N[1]	N
Transurethral	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$	_	_						- 	
Intravascular			_					_		
Peripheral Vascular			_							
Laparoscopic			\perp							
Musculo-skeletal		\perp	1_							
Conventional										
Musculoskeletal Superficial		\perp	\perp							
Other (specify)										

N=new indication; P=previously cleared by FDA; E= added under Appendix E Additional Comments:

[1] Applicable combined modes: B+M+PW+CFM+Amplitude Doppler.

[2] Tissue Enhancement Imaging (TEI)

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(Division Sign-Off) Division of Reproductive, Abdominal, and Radiological Devices 510(k) Number	<u>u</u>	